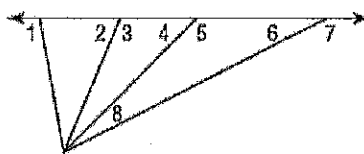


Determine which angle has the greatest measure.

17. $\angle 1$, $\angle 2$, $\angle 4$ 18. $\angle 2$, $\angle 4$, $\angle 6$
 19. $\angle 3$, $\angle 5$, $\angle 7$ 20. $\angle 1$, $\angle 2$, $\angle 6$
 21. $\angle 5$, $\angle 7$, $\angle 8$ 22. $\angle 2$, $\angle 6$, $\angle 8$



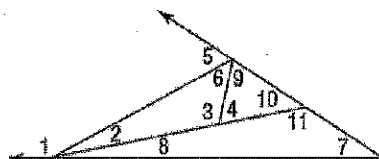
23. $\angle 2$, $\angle 10$, $\angle 7$
 $\angle 8$

24. $\angle 4$, $\angle 1$
 $\angle 11$

25. $\angle 3$, $\angle 5$

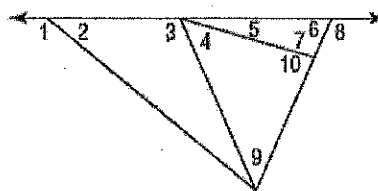
Use the Exterior Angle Inequality Theorem to list all angles that satisfy the stated condition.

23. all angles whose measures are less than $m\angle 5$
 24. all angles whose measures are greater than $m\angle 6$
 25. all angles whose measures are greater than $m\angle 10$



Use the Exterior Angle Inequality Theorem to list all angles that satisfy the stated condition.

26. all angles whose measures are less than $m\angle 1$
 27. all angles whose measures are greater than $m\angle 9$
 28. all angles whose measures are less than $m\angle 8$



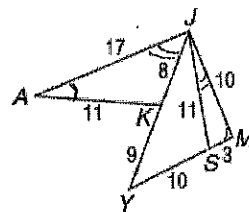
26. $\angle 3$, $\angle 6$, $\angle 9$

27. $\angle 8$, $\angle 1$, $\angle 7$
 $\angle 3$

28. $\angle 5$, $\angle 7$, $\angle 4$, $\angle 9$, $\angle 2$

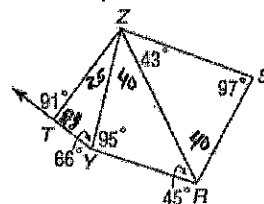
Determine the relationship between the measures of the given angles.

29. $\angle KAJ$, $\angle AJK$ 30. $\angle MYJ$, $\angle JYM$
 31. $\angle SMJ$, $\angle MJS$ 32. $\angle AKJ$, $\angle JAK$
 33. $\angle MYJ$, $\angle JMY$ 34. $\angle JSY$, $\angle JYS$



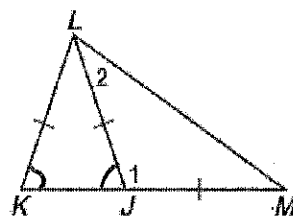
Determine the relationship between the lengths of the given sides.

37. \overline{ZY} , \overline{YR} 38. \overline{SR} , \overline{ZS}
 39. \overline{RZ} , \overline{SR} 40. \overline{ZY} , \overline{RZ}
 41. \overline{TY} , \overline{ZY} 42. \overline{TY} , \overline{ZT}



35. Given: $\overline{JM} \cong \overline{JL}$
 $\overline{JL} \cong \overline{KL}$

Prove: $m\angle 1 > m\angle 2$



- ① $\overline{JM} \cong \overline{JL}$ $\overline{JL} \cong \overline{KL}$ ① Given
 ② $\angle K \cong \angle LJK$ ② \triangle thm
 ③ $m\angle K = m\angle LJK$ ③ def of \cong
 ④ $m\angle 1 > m\angle K$; $m\angle LJK > m\angle 2$ ④ Ext \angle Ineq
 ⑤ $m\angle 1 > m\angle LJK$ ⑤ Subst
 ⑥ $m\angle 1 > m\angle 2$ ⑥ Transitive